Subject: Re: extract circle from data with idl
Posted by Markus Schmassmann on Thu, 12 Oct 2017 14:27:15 GMT
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On 10/12/2017 02:10 PM, termybel@gmail.com wrote:
> Thanks to answer but I have a probelm.
>
> You puth this: if n_elements(li) ne 1 then message, 'not exactly 1 contour'
>
> and my program say: not exactly 1 contour
>
> How I can solve it?
>
> If I ask in idl " help,/str,li" and the answer is:
>
> Structure CONTOUR_DBL_PATH_STRUCTURE, 6 tags, length=24, data length=20:
>   TYPE   BYTE   1
>   HIGH_LOW   BYTE   1
>   LEVEL   INT   0
>   N   LONG   7
>   OFFSET   LONG   0
>   VALUE   DOUBLE   9.0000000
>
> and for " help,/str,lines"
> LINES   DOUBLE   = Array[2, 5447]
>
> My contour isn't a perfect circle. Maybe is this the problem?
>
> This is my program where the image is a flat field panel minus dark:
>
> file_ff1='ff_100s_3.fits'   ;immagine
> immagine_ff1=readfits (file_ff1, header1)   ; leggo l'immagine del flat field panel
> file_dark='ff_100s_dark_3.fits'   ;immagine
> immagine_dark=readfits (file_dark, header1)   ; leggo l'immagine della dark
>
> n=100.   ; secondi di esposizione dell'immagine
> ffp=(immagine_ff1-immagine_dark)/n
>
> ; contour per selezionare soglie di equivalore
>
> speriamo=fltarr(2048,2048)   ; creo una matrice 2048x2048
> dimensioni=size(speriamo,/dimensions)
> cubo=where(ffp lt 9.5 or ffp gt 10)
>
>
>
> wrong_matrix=array_indices(dimensioni, cubo,/dimensions)
> indxw=reform(wrong_matrix(0,*))

```
>  indyw=reform(wrong_matrix(1,*))
>  ;ffp(indxw,indyw)=0.
>  ;c = CONTOUR(ffp, dimensions=[512,512], Title='prova cubo')
>
>  ; DATA   being the data to be contoured
>  level=9
>  contour, smooth(ffp(250:1700, 250:1700),3), path_info=li,closed=1 , path_xy=lines,
/path_data_coord, levels=[level], /path_double
>    ; lix=lines(0,*)
>    ; liy=lines(1,*)
>    ; liyd=deriv(lix,liy)
>    ;ind=where(abs(liyd) le 0.0001)
>
>  if n_elements(li) ne 1 then message, 'not exactly 1 contour'
>
>
>  cont_obj =obj_new('IDLanROI',lines)
>  void= cont_obj.ComputeGeometry(centroid=center)
>  ;fit_ellipse(
>  print, center[0:1]
>
>  end

contour, smooth(ffp(250:1700, 250:1700),3), path_info=li,closed=1 , $
     path_xy=lines, /path_data_coord, levels=[level], /path_double
contour, smooth(ffp(250:1700, 250:1700),3), levels=[level]
; shows you there are more than 1 contour,
; you need to identify the correct one
; often the best is the longest
void=max(li.n,j)
line=[*,li[j].offset+lindgen(li[j].n)]
plot, line[0,*],line[1,*]
cont_obj =obj_new('IDLanROI',line)
```